

CLAIMS:

1. Method for controlling the transmission power employed by a transmitting unit for transmitting multicast signals via a radio interface to at least two communication devices of a multicast group using a single physical channel, wherein at least the communication device of said at least two communication devices receiving said multicast signals with the lowest quality transmits power control commands to said transmitting unit, which power control commands indicate whether the transmission power employed by said transmitting unit for transmitting said multicast signals should be increased or reduced, and wherein said transmitting unit adjusts said transmission power based on power control commands received from at least one of said at least two communication devices in a way that said power control commands of said communication device receiving said multicast signals with the lowest quality have at least the most significant influence on said adjustment.
2. Method according to claim 1, wherein each of said at least two communication devices transmits power control commands to said transmitting unit, wherein said transmitting unit increases said transmission power employed for transmitting said multicast signals in case any of said communication devices transmits a power control command indicating a required increase of said transmission power, and wherein said transmitting unit reduces said transmission power only in case all of said communication devices transmit a power control command indicating that a reduction of said transmission power is possible.
3. Method according to claim 1, wherein each of said at least two communication devices transmits a quality indication to said transmitting unit, which quality indication reflects the quality of multicast signals received at the respective communication device, wherein said transmitting unit requests the communication

device providing the quality indication which reflects the lowest quality of received multicast signals to transmit in addition power control commands, wherein said communication device providing said quality indication which reflects the lowest quality of received multicast signals transmits upon said request power control commands to said transmitting unit, and wherein said transmitting unit adjusts said transmission power employed for transmitting said multicast signals according to power control commands received by said communication device providing said quality indication which reflects the lowest quality of received multicast signals.

10 4. Method according to claim 3, wherein said transmitting unit requests another communication device to transmit power control commands instead, when said transmitting unit detects that said other communication device transmits a quality indication which indicates the lowest quality of received multicast signals.

15 5. Method according to claim 1, wherein each of said at least two communication devices transmits to said transmitting unit power control commands and a quality indication, which quality indication reflects the quality of multicast signals received at the respective communication device, wherein said transmitting unit weights said received power control commands based on said received quality indications in a way that the power control command from the communication device providing the quality indication which reflects the lowest quality of received multicast signals obtains the highest impact, wherein said transmitting unit sums the resulting weighted power control commands, and wherein said transmitting unit adjusts said transmission power employed for transmitting said multicast signals according to said weighted and
20 summed power control commands.
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6. Method according to one of the preceding claims, wherein power control commands indicate whether the current transmission power should be increased, reduced or remain unchanged.

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7. Transmitting unit comprising means for carrying out the transmitting unit related steps of one of the preceding claims.

8. Communication device comprising means for carrying out the communication device related steps of one of claims 1 to 6.

5 9. Communication system comprising a transmitting unit with means for carrying out the transmitting unit related steps of one of claims 1 to 6 and at least two communication devices with means for carrying out the communication device related steps of one of claims 1 to 6.

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